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10/584,001	11/29/2006	Ricky William Barnett	042933/313261	6295

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EXAMINER

MAH, CHUCK Y

ART UNIT	PAPER NUMBER
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3677

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/584,001	Applicant(s) BARNETT, RICKY WILLIAM	
	Examiner Chuck Mah	Art Unit 3677	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 July 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 20-27 is/are pending in the application.
- 4a) Of the above claim(s) 21-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Newly submitted claims 21-27 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: claims 21-27, drawn to an apparatus having wiring electrically connecting the first portion and second portion and the wiring entering the hinge from the first portion of the electronic device and entering the second portion of the electronic device from the second hinge, does not require the particulars of the subcombinations as claimed for patentability. The hinge subcombination has separate utility such as for containers, household appliance, or vehicle components.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 21-27 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-11 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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In claim 1, lines 3-6 are confusing. From lines 3-4, it is understood that “a through hole” is configured for receiving wiring”, suggesting that the wiring is not a positive limitation. However, lines 5-6, the claim recites that “wiring enters the hinge”. It is not clear whether applicant attempts to claim the hinge-wiring combination or the hinge alone. For examination purpose, all claims will be treated as claiming a hinge, within the scope of the preamble of the claim.

Further, in claim 1, lines 5-6, it is not clear exactly what “a first axis” and “a second axis” are referring to. How can the wiring pass two axes when “at least one of” the through holes, including exactly one hole, is presented? The claim does not provide sufficient information to depict the structural relationship between the hinge elements, the bracket and the first and second axes, such that the wiring can pass through two axes.

Note similar errors in claim 11.

In claim 6, line 2, “third and fourth...” is vague and indefinite, without defining “first and second” in the claims.

In claim 7, line 2, it is not clear how the “three hinge elements” are related to the “two hinge elements” stated in claim 2. Line 4, “is perpendicular to...” is vague and indefinite, without defining the geometry of the third element.

In claim 8, line 3, it is not clear what exactly "three bosses" are referred to and how these bosses are related to the same in claim 1 or the three hinge elements stated in claim 7. Also, note that each "hinge element" has "an arm" as stated in claim 1. It cannot be understood how a hinge element with an arm is attached to the cross-piece. None of the embodiments shows as such.

In claim 20, line 6, it is not clear how the "three hinge elements" are related to "at least two hinge elements". Are the three hinge elements referring to additional elements or referring back to said "at least two"? Line 8, "is perpendicular to..." is vague and indefinite, without defining the geometry of the third element. Lines 10-11, "on three bosses with the two bosses" should be "on the three bosses with two of the bosses". Lines 13-14, it is not clear how the third boss, part of one of the hinge elements including an arm (lines 2-3 of the claim), is structurally attached to the further bracket. The figures do not show such embodiment. Lines 16-20 do not make sense because at least two of the hinge elements attached to the first bracket cannot be attached to the second bracket. Additional hinge elements (at least two) are required in order to render the claimed device operable.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 3-5 and 11 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Lu (6,018,847). Lu has two hinge elements each having an arm 60 and a boss 10 with a through hole, spring 72, and both elements being mounted on a bracket 40 with the through holes in alignment. "wiring" in "configured for receiving wiring" is not a positive limitation. Note that intended use, how the wiring or its axis is related to the hinge, is given no patentable weight.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lu '847 in view of Katoh (5,970,580).

Lu discloses the claimed invention but for the through hole being 4 mm or larger. Katoh teaches the through hole being sufficiently larger to allow the cable to route through. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the through hole of Lu with sufficient size to allow a cable to route through the hinge axis, as to minimize the space occupied by the cable in the electronic device. As to the specific size of the through hole, Katoh does not show the hole being 4 mm or larger. However, it would have been an obvious matter of design

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choice to form the hole 4 mm or larger to accommodate the size of the cable, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lu '847 in view of Chen et al. (5,812,368) and Kuivas et al. (6,900,981).

Lu does not show the bracket being H-shaped and with four hinge elements. Chen et al. teaches a hinge having an H-shaped bracket 21 with 4 identical hinge elements 23 respectively attached to the four lobes of the bracket to provide a multi-axis hinge, in order to enhance the positioning adjustability between the upper part and the lower part of the electronic device. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the bracket of Lu with an H-shaped bracket with four hinge elements as taught by Chen et al. to enhance the positioning adjustment between the upper part and lower part of the electronic device. Further, both Lu and Chen et al. have stops formed on the bracket to limit the opening angle between the upper and the lower parts. Kuivas et al. teaches a hinge bracket 36 having four hinge elements 54, 58, 60, 66, without any stops to restrict the opening angle, to enable the upper part and the lower part to rotate 360 degrees with respect to one another (see figures 5-7). It would have been obvious to one of ordinary skill in the art at the time the invention was made to eliminate the stops of Lu and Chen et al. as taught by Kuivas et al. so that the upper part and the lower part of the electronic device can rotate 360 degrees with respect to one another.

9. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lu '847 in view of JP 2002-297574A.

Lu does not show three hinge elements. JP teaches a hinge for an electronic device, having three hinge elements, with the third hinge element attached to the C-shaped bracket 11 and having a bracket and a boss (a third bracket attached to a vertical hinge pintle (boss) shown in fig. 3) to allow the upper part and lower part of the electronic device to rotate in a vertical direction and a horizontal direction. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the hinge of Lu with a third hinge element as taught by JP, to allow the upper and the lower parts to rotate in both vertical and horizontal directions.

10. Claim 10 may be given favorable consideration if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

11. Claim 20 may be given favorable consideration if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Response to Arguments

12. Applicant's arguments filed July 13, 2010 have been fully considered but they are not persuasive. (1). Regarding applicant's argument on the 102(b) rejection, see reasons stated in the rejection above. (2). Regarding applicant's argument on Katoh,

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agreeably it may be true that Katoh does not show wiring entering and exiting through different axes. However, the "wiring" is not a positive limitation. And, the rejection is not relied upon whether the wiring is routed through two axes. The rejection is fully relied upon whether the size of the "through hole" is obvious. Applicant's argument is irrelevant.

Conclusion

13. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuck Mah whose telephone number is (571)272-7059. The examiner can normally be reached on 5/4-9.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Victor Batson can be reached on (571)272-6987. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Chuck Mah/
Primary Examiner, Art Unit 3677

CM